

## Mint of the United States at Philadelphia, Pa.,

COINER'S DEPARTMENT,

March 17<sup>th</sup> 1890.

Hon O. C. Rosbyshell.

Superintendent.

Sir.

Referring to the conversation with you relative to the diminished percentage of coin as compared with the amount operated upon. I have the honor to state. that in my opinion, this is due to the condition and quality of the ingots received, and the great pressure upon this department which is far above the present capacity of the machinery, and the time necessary to perform the work.

The results of the Coiner's work depends in a great measure on the material furnished him to operate, and in treating the ingots to the first operation, that of rolling, we have been met at times with rough ingots, caused by irregularities on the interior surface of old burnt out moulds, which makes the ingots difficult of manipulation, and in some cases,



after the expenditure of much time and labor, are required to be cut up and returned for melting without any resulting gain,

When the metal is hard and intractable, it gives trouble at the draw benches, where after repeated trials to bring the strips within proper limits of adjustment, it is sometimes impossible to get the same results from both ends of the strips, this makes some condemned blanks unavoidable in the cutting, which is done to take advantage of the good pieces. Blistered fillets from ingots not cast solid in the moulds, are also returned for melting to insure against issuing dumb or split pieces.

When large amounts are expected, the department is taxed to its utmost limit, and in endeavoring to meet the demands, we labor under the disadvantage of not having sufficient time for the different operations to insure the best results,

The amount being mandatory, without reference to per centage, definite amounts must be



secured each day to make sure the count, which will not allow opportunity for experimenting in case the metal is refractory and difficult to control, therefore, it sometimes happens that in different metal is rejected because of doubtful results.

The best products are to be obtained when the proportion to be furnished is within reasonable limits, as in the month of January this year, the coinage netted 51%, the amount required being only \$1,350,000.00, better opportunities were afforded for thorough work, not only in this department, but also in the melting operations,

In this connection I will refer to the Director's report of 1877 page 146 in which he quotes the experiments of such eminent authorities as Levol of Paris, and Roberts in London, that first, in the case of melts, it must not fail to be considered that unequal distribution of silver begins in the ingots, and that excessive inequality of fillets in fineness and



density is not wholly chargeable to ineffective annealing and unequal rolling,

Some of the difficulties to contend with, has been that the rolls are worn out, soft on their face, and reduced in size from constant use and regrinding, so that they will not produce that uniformity in the thickness of the strip that is so desirable,

I recommended and forwarded to your predecessor, a requisition for new rolls: over two years ago, but no action was taken, but recently by your order, a pair is being built, and I expect to have them in use within a short time,

I beg leave to remind you, that this department has been strained to its fullest capacity in meeting all demands put upon it, which required every attention in managing the work, and I think, when all the circumstances are taken into consideration, the machinery



working sixteen hours continuously, thereby exceeding its intended capacity, and the many changes that have taken place, the results have been very credit-  
-able as compared with the amount of work done at the other mints combined, to which I would respectfully refer you to the Director's report for 1889, page 116, which statement shows nearly double the amount of adjustable pieces were coined here, and twice the number of pieces in subsidiary coin struck, and in addition to this, 51,516,861 pieces in minor coins were turned out during the last fiscal year.

I am at all times willing to further any improvements that will bring about better results than has heretofore been possible, and with the prospect of having new rolls, and the reorganization of the force to an advantage, together with changing the management of the chief operatives in the rolling room, which promises so



well, that I am strong in the belief that  
the future will show an increased production  
in the percentage of coin.

Very Respectfully—

Your obedient servant,  
W. A. Steel

Courier.



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Coiner's Department,  
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Coiner